*FM 23-10
17 August 1994

FIELD MANUAL
No. 23-10

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 17 August 1994

SNIPER TRAINING

CONTENTS

page

Preface ix

CHAPTER 1. INTRODUCTION

1-1. Mission 1-1
1-2. Organization 1-2
1-3. Personnel Selection Criteria 1-3
1-4. Sniper and Observer Responsibilities 1-5
1-5. Team Firing Techniques 1-6

CHAPTER 2. EQUIPMENT

Section I. **M24 Sniper Weapon System** 2-1
2-1. Operations and Functions 2-4
2-2. Inspection 2-9
2-3. Care and Maintenance 2-9
2-4. Disassembly 2-15
2-5. Loading and Unloading 2-17
2-6. Storage 2-18

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

*This publication supersedes TC 23-14, 14 June 1989.

page

Section II. **Ammunition** 2-18
2-7. Types and Characteristic 2-18
2-8. Round-Count Book 2-19
2-9. M24 Malfunctions and Corrections 2-19

Section III. **Sniper Sighting Devices** 2-22
2-10. M3A Scope 2-22
2-11. Iron Sights 2-29

Section IV. **Other Equipment** 2-32
2-12. M16A1/A2 Rifle with M203 Grenade Launcher . 2-32
2-13. Image Intensification and Infrared Devices . . . 2-33
2-14. M49 Observation Telescope 2-37
2-15. M19 Binoculars 2-39
2-16. M22 Binoculars 2-40
2-17. Other Sniper Equipment 2-40

Section V. **Communications Equipment** 2-41
2-18. AN/PRC-77 Radio 2-41
2-19. AN/PRC-104A Radio Transceiver 2-42
2-20. AN/PRC-119 Radio 2-43

CHAPTER 3. MARKSMANSHIP

Section I. **Fundamentals** 3-1
3-1. Steady Position Elements 3-1
3-2. Aiming 3-16
3-3. Breath Control 3-20
3-4. Trigger Control 3-21
3-5. Follow-Through 3-22
3-6. Calling the Shot 3-22
3-7. Integrated Act of Firing 3-23

page

Section II. **Ballistics** 3-25
3-8. Types of Ballistics 3-25
3-9. Terminology 3-25
3-10. Effects on Trajectory 3-26
3-11. Angle Firing 3-28

Section III. **Effects of Weather** 3-29
3-12. Wind Classification 3-29
3-13. Wind Velocity 3-31
3-14. Conversion of Wind Velocity to Minutes of Angle 3-33
3-15. Effects of Light 3-36
3-16. Effects of Temperature 3-36
3-17. Effects of Humidity 3-36

Section IV. **Sniper Data Book** 3-36
3-18. Entries 3-37
3-19. Analysis 3-38

Section V. **Holdoff** 3-40
3-20. Elevation 3-40
3-21. Windage 3-42

Section VI. **Engagement of Moving Targets** 3-43
3-22. Techniques 3-43
3-23. Common Errors 3-44
3-24. Calculation of Leads 3-44

Section VII. **Nuclear, Biological, Chemical** 3-45
3-25. Protective Mask 3-45
3-26. Mission-Oriented Protection Posture 3-46

page

CHAPTER 4. FIELD TECHNIQUES

Section I. **Camouflage** 4-1

4-1. Target Indicators 4-1

4-2. Basic Methods 4-2

4-3. Types of Camouflage 4-2

4-4. Ghillie Suit 4-3

4-5. Field-Expedient Camouflage 4-4

4-6. Cover and Concealment 4-6

Section II. **Movement** 4-7

4-7. Rules of Movement 4-7

4-8. Individual Movement Techniques 4-8

4-9. Sniper Team Movement and Navigation 4-11

Section III. **Selection, Occupation, and Construction of Sniper Positions** 4-14

4-10. Selection 4-14

4-11. Occupation 4-15

4-12. Construction 4-16

4-13. Positions in Urban Terrain 4-23

Section IV. **Observation** 4-28

4-14. Hasty and Detailed Searches 4-29

4-15. Elements of Observation 4-30

4-16. Twilight Techniques 4-31

4-17. Night Techniques 4-31

4-18. Illumination Aids 4-32

page

Section V. **Target Detection and Selection** 4-32

4-19. Target Indexing 4-32

4-20. Target Selection 4-34

4-21. Key Target 4-35

Section VI. **Range Estimation** 4-36

4-22. Factors Affecting Range Estimation 4-36

4-23. Range Estimation Methods 4-36

4-24. Laser Range Finder 4-40

4-25. Estimation Guidelines 4-40

Section VII. **Information Records** 4-42

4-26. Range Card 4-42

4-27. Military Sketch 4-43

4-28. Sniper Data Book 4-46

CHAPTER 5. MISSION PREPARATION

Section I. **Planning and Coordination** 5-1

5-1. Mission Alert 5-1

5-2. Warning Order 5-1

5-3. Tentative Plan 5-1

5-4. Coordination Checklists 5-2

5-5. Completion of Plan 5-7

5-6. Operation Order 5-7

5-7. Briefback 5-8

5-8. Equipment Check 5-9

5-9. Final Inspection 5-9

5-10. Rehearsals 5-10

5-11. Final Preparations 5-10

page

5-12. Preparation for Debriefing 5-11
5-13. Countersniper Operation 5-11
5-14. Reaction to Enemy Sniper Fire 5-13

Section II. **Mission Packing Lists** 5-13
5-15. Arms and Ammunition 5-13
5-16. Special Equipment 5-14
5-17. Uniforms and Equipment 5-15
5-18. Optional Equipment 5-16
5-19. Special Tools and Equipment (MOUT) 5-17
5-20. Additional Equipment Transport 5-18

CHAPTER 6. OPERATIONS

Section I. **Insertion** 6-1
6-1. Planning Insertion 6-1
6-2. Air Insertion 6-3
6-3. Amphibious Insertion 6-4
6-4. Land Insertion 6-7
6-5. Vehicle Insertion 6-9

Section II. **Execution** 6-10
6-6. Movement to Target Area 6-10
6-7. Occupation of Position 6-11
6-8. Site Selection 6-11
6-9. Reports 6-12
6-10. Movement to Extraction Site 6-12

Section III. **Extraction and Recovery** 6-13
6-11. Planning 6-13
6-12. Evasion and Escape Plan 6-13
6-13. Air or Water Extraction 6-14

page

6-14. Land Exfiltration 6-15
6-15. Vehicle Extraction 6-15
6-16. Recovery 6-16

CHAPTER 7. COMMUNICATIONS
Section I. **Field-Expedient Antennas** 7-1
7-1. Repair Technique 7-1
7-2. Construction and Adjustment 7-3
7-3. Field-Expedient Omnidirectional Antenna 7-4
7-4. Field-Expedient Directional Antenna 7-9
7-5. Antenna Length 7-12
7-6. Antenna Orientation 7-13
7-7. Improvement of Marginal Communications 7-13

Section II. **Radio Operations Under UnusualConditions** . 7-13
7-8. Arctic Areas 7-13
7-9. Jungle Areas 7-15
7-10. Desert Areas 7-20
7-11. Mountainous Areas 7-22
7-12. Urbanized Terrain 7-22
7-13. Nuclear, Biological, and Chemical Environment . . 7-22

Section III. **Communications Format** 7-23
7-14. Spot Report 7-23
7-15. Situation Report 7-24
7-16. Reconnaissance Report 7-25
7-17. Meaconing, Intrusion, Jamming, and Interference Report 7-28
7-18. Shelling Reports 7-30
7-19. Enemy Prisoner of War/Captured Materiel Report 7-31

7-20. NBC 1 Report 7-32
7-21. Medical Evacuation Request 7-33

CHAPTER 8. TRACKING/COUNTERTRACKING
Section I. **Tracking** 8-1
8-1. Displacement 8-1
8-2. Stains 8-5
8-3. Weather 8-6
8-4. Litter 8-8
8-5. Camouflage 8-8
8-6. Immediate-Use Intelligence 8-8
8-7. Dog/Handler Tracking Teams 8-9

Section II. **Countertracking** 8-11
8-8. Evasion 8-11
8-9. Camouflage 8-11
8-10. Deception Techniques 8-12

CHAPTER 9. SNIPER SUSTAINMENT TRAINING
9-1. Basic Skills Sustainment 9-1
9-2. Additional Skills Sustainment 9-15
9-3. Training Notes 9-22
9-4. Example 5-day Sniper Sustainment Training Program 9-25
9-5. Emergency Deployment Readiness Exercise . . . 9-34
9-6. Record Fire Tables 9-36
9-7. M24 Sniper MILES Training 9-40

APPENDIX A. SNIPER WEAPONS OF THE WORLD A-1
APPENDIX B. M21 SNIPER WEAPON SYSTEM B-1
GLOSSARY Glossary-1
REFERENCES References-1
INDEX Index-1